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ABSTRACT

The publication presents program standards and performance objectives for industrial arts education as defined in the California State Plan for Vocational Education. It was designed for industrial arts teachers who wish to assist students in making meaningful occupational selections and to prepare them for enrollment in advanced vocational programs. A list of guidelines for industrial arts education as defined by the California State Plan for Vocational Education appears, along with appropriate professional and program standards. The major portion of the document consists of: (1) State guidelines, (2) program and professional standards with methods for implementation, measurement, and verification in order to assist school districts in conforming with State standards, and (3) program objectives with suggestions for further implementation of the standards. A double-page format for each State guideline provides: (1) the program standard; (2) some suggested methods for implementation, measurement, and/or verification; (3) program objectives; and (4) suggestions for implementing the objective. Five categories of functions of industrial arts programs are listed as guidelines for evaluation purposes. Appendixes contain material related to industrial arts education and the California State Plan for Vocational Education. (Author/NJ)

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CALIFORNIA

INDUSTRIAL ARTS EDUCATION

PROGRAM GUIDE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREFACE

During 1974-75, the California State Department of Education, Bureau of Industrial Education, initiated a project in the area of industrial arts education, which was awarded to the Office of the Los Angeles County Superintendent of Schools, Career Education Section.

The "California Industrial Arts Project" (CIAP) had as its major purpose the development, preparation, and integration of professional and program standards and performance objectives for industrial arts education as defined in the State Plan for Vocational Education. This publication contains material developed through the project activities as well as materials prepared by staff of the Bureau of Industrial Education. These materials are for Industrial Arts instructors who wish to broaden and enhance their instructional programs in order to:

A. assist individuals in an industrial arts education instructional program to make meaningful occupational selections; and

B. prepare individuals in an industrial arts education instructional program for enrollment in advanced or highly skilled vocational programs.

The advice and cooperation of the Statewide Educational Ad Hoc Advisory Committee on Industrial Arts Education (in the development of this publication) was utilized, and is gratefully acknowledged (See Appendix C)

The Bureau of Industrial Education gratefully acknowledges the leadership provided by David Taxis, Project Director, and his fine staff from the Career Education Section of the Office of the Los Angeles County Superintendent of Schools.

James Herman, Chief
Bureau of Industrial Education

INDUSTRIAL EDUCATION IN CALIFORNIA

Industrial Education is a generic term which applies to all levels of education and training which relate directly to industrial occupations. Industrial Education includes the major subject-matter fields of industrial arts, trade and industry, technical and health careers and services. A comprehensive industrial education program assists citizens to select, prepare for, and advance in occupations or careers of their choice which currently exist or are emerging. This guide describes a method of implementing industrial arts education as defined in the State Plan for Vocational Education.

Existing vocational education legislation provides industrial arts programs with an opportunity to fulfill two of the three major goals of industrial education:

- Assisting individuals in the making of informed and meaningful occupational choices; and
- Assisting in preparing individuals for enrollment in advanced or highly skilled vocational and technical education programs.

The responsibility of providing programs specifically designed for preparing individuals for gainful employment—the third role as defined in federal legislation—is not a role for industrial arts programs in the amended vocational education act and regulations. However, industrial arts educators do have the responsibility of establishing a close working relationship with all industrial educators and agencies to ensure a systematic and sequential delivery system which will provide opportunities for all students to become technologically literate, regardless of lifestyle or career pursuits.

Industrial arts education provides opportunities for all students from the elementary grade levels through higher education and assists them in developing an understanding of the technical, consumer, occupational, recreational, organizational, managerial, social, historical, and cultural aspects of industry and technology. Students have opportunities to acquire industrial-technical knowledge and competencies through creative problem-solving learning experiences involving such activities as experimenting, planning, designing, constructing, evaluating, and using tools, machines, materials, and processes. By providing creative and problem-solving learning experiences, an industrial arts education program is organized to assist individuals in making informed and meaningful occupational career choices and is designed to provide a continuum of articulated experiences and activities that further the discovery and development of each student's career potential, technical awareness, judgement, self-reliance, and resourcefulness to succeed as an effective individual in our industrial-technical society.

The following statements of purpose are fundamental to industrial arts education, as it provides opportunities for students to:

- Develop an insight and understanding of industry and its place in our culture;
- Develop and/or discover their talents, attitudes, interests and individual potential as they are related to the industrial-technical areas;
- Develop an awareness of the varied career opportunities in our industrial-technical society;
- Develop abilities in the proper and safe use of the tools, machines, processes, and techniques utilized by industry;
- Develop problem-solving and creative abilities involving materials, processes, and products of industry;
- Interrelate and coordinate the content of industrial arts education with that of other subject matter disciplines;
- Make an informed and meaningful occupational/educational selection; and
- Prepare for entrance into advanced or highly skilled vocational education programs.

GUIDELINES WITH PROGRAM AND PROFESSIONAL STANDARDS FOR INDUSTRIAL ARTS EDUCATION

The guidelines developed for industrial arts education as defined in the California State Plan for Vocational Education are the result of the efforts of a California Statewide Educational Ad Hoc Advisory Committee. In addition to the guidelines, program and professional standards were developed with the cooperation of over 900 industrial educators in California.

The following is a list of guidelines with the appropriate program and professional standards.

State Guideline Number 1. Programs and/or services must meet the Administrative Provisions in Part I of the California State Plan for Vocational Education.

Program Standards

1.1 Encourage students to select industrial arts programs on the basis of their expressed interests and abilities.

1.2 Provide for a random sampling follow-up of students who complete industrial arts programs.

1.3 Form an advisory committee to assist in the planning and evaluation of industrial arts programs involving students, parents, administrators, and representatives of community groups and agencies.

1.4 Provide occupational information and exploratory experiences that will prepare students for enrollment in advanced vocational and technical education programs.

State Guideline Number 2. The professional staff responsible for providing programs and/or services must meet the minimum qualifications as set forth in the California State Plan for Vocational Education.

Professional Standards

2.1 Possession of a valid credential authorizing the teaching of industrial arts education.

State Guideline Number 3. In addition to the California State Plan standards, professional staff must be qualified by professional training, inservice, and work experience related to the subject-matter areas to be taught as determined by the local educational agency.

Professional Standards

3.1 Demonstrate knowledge of the goals and objectives of Industrial Arts Education as defined in the California State Plan for Vocational Education.

3.2 Possess the skills and knowledge necessary to assist students in making career choices in one or more career clusters relating to industrial occupations.

3.3 Demonstrate knowledge about advanced training programs in occupations relating to his/her industrial arts class.

3.4 Complete successful work experience in an occupation related to the instructional area.

3.5 Possess an understanding of the American system of industry and free enterprise.

3.6 Maintain and update practical experience in the appropriate subject matter area.

3.7 Participate in inservice activities on a regular basis.

3.8 Possess skills and knowledge necessary for effective occupational guidance.

State Guideline Number 4. The program, with written course objectives, and/or services must provide for both the dissemination of information and exploration of careers relative to providing opportunities within broad clusters of industrial occupations.

Professional Standards

4.1 Possess recent knowledge of vocational guidance and career counseling information and techniques.

Program Standards

4.2 Provide students with exploratory experiences in shops and laboratories, and observations in business or industry, in order to acquaint them with jobs in appropriate occupations.

4.3 Provide opportunities for students to go on field trips that relate to their specific interest.

4.4 Provide occupational information and instruction pertaining to a broad range of occupations, including training requisites, working conditions, remuneration, and other relevant information.

State Guideline Number 5. Equipment, facilities, materials, and services should be relevant to current industry practices and contribute to developing concepts, experiences, and skills related to industrial occupations.

Program Standards

5.1 Utilize the most recent, accepted industrial processes, equipment, facilities and techniques.

5.2 Provide instructional and exploratory activities based upon current industrial practices.

State Guideline Number 6. Programs, with written course objectives, and/or services that are provided for the students, must result in an opportunity for the student to make a more informed and meaningful occupational and/or educational selection.

Program Standards

6.1 Provide assistance to students in making informed and meaningful occupational choices.

6.2 Provide guidance and counseling for students enrolled in the industrial arts program to assist them in making informed and meaningful choices in selected occupational fields.

6.3 Provide students with the opportunity to internalize the concept that work has dignity and to develop an appreciation for good workmanship.

State Guideline Number 7. Programs, with written course objectives, must show evidence of articulation and coordination on an intra- and inter-curricular basis, grade levels 7 through 12.

Program Standards

7.1 Design and operate programs as an adjunct or introduction to a related vocational educational training program.

7.2 Develop an articulated relationship with vocational industrial education programs available in the area.

OBJECTIVES AND SUGGESTIONS FOR IMPLEMENTATION

OF PROGRAM STANDARDS

The materials included in this section consist of (1) state guidelines for industrial arts education as defined in the California State Plan for Vocational Education, (2) program and professional standards with methods for implementation, measurement, and/or verification in order to assist school districts in conforming with state standards and (3) program objectives with methods for further implementation of the standards.

The State Guideline is given at the top of the page. Under each guideline the program standard is given with some suggested methods for implementation and verification. On the facing page are program objectives and suggestions for implementing the objective.

STATE GUIDELINE NUMBER 1

PROGRAMS AND/OR SERVICES MUST MEET THE ADMINISTRATIVE PROVISIONS IN PART I OF THE CALIFORNIA STATE PLAN FOR VOCATIONAL EDUCATION

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
1.1 Encourage students to select industrial arts programs on the basis of their expressed interests and abilities.	• Provide, administer, and analyze a standardized student assessment and/or interest survey and a manual dexterity test to potential students. • Have students obtain a personal recommendation from a teacher, counselor, administrator, or other knowledgeable and responsible person as a prerequisite. • Provide student with exploratory work experience opportunities. • Utilize the career resource center for information about occupations. • Bring resource people from various industries to the campus for talks and presentations.

PROGRAM OBJECTIVES	METHODS FOR IMPLEMENTING, THE OBJECTIVES:
• Establish a method to help students identify their interests and abilities and relate them to current industrial arts course offerings.	• Provide an interest survey for the student population. • Develop a publication, a slide/tape presentation, etc., which students and teachers can utilize in trying to match interests and abilities to available course offerings.

STATE GUIDELINE NUMBER 1

PROGRAMS AND/OR SERVICES MUST MEET THE ADMINISTRATIVE PROVISIONS IN PART I OF THE CALIFORNIA STATE PLAN FOR VOCATIONAL EDUCATION

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
1.2 Provide for a random sampling follow-up of students who complete industrial arts programs.	• Develop an instrument to ascertain the success of students who have enrolled in advanced programs in industrial education instructional areas. • Develop a questionnaire for student evaluation of the adequacy of course content in relation to their success in advanced programs. • Provide career information to students about programs in advanced vocational training. Information could include entrance requirements, length of training program, cost, completion certificates, and placement. • Create an awareness of occupational families through the instructional program. • Provide an exploratory program in which experiences are related to families of occupations. • Provide training in job level skills and processes in the instructional program. • Identify interests and aptitudes of students through counseling, guidance, and testing. • Develop an articulation between the various levels of industrial programs. • Standardize feeder programs.

PROGRAM OBJECTIVES

- Utilize a random sampling follow-up of students as part of the program evaluation.
- Provide opportunities in the industrial arts program for students to meet appropriate prerequisite training for advanced or highly skilled vocational and technical training programs.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Use the results of the random sampling follow-up survey to determine the success of students who have enrolled in advanced programs in industrial education instructional areas as a basis for curriculum change.
- Obtain advice from the advisory committee on how best to make sure that students are more successful in advanced programs based on the results of the follow-up study.
- Determine and list the characteristics of advanced programs available to industrial arts students in terms of factors such as objectives, content, and activities.
- Prepare an analysis of the above programs in terms of the prerequisite training needed.
- Provide students with information on the prerequisite training needed for enrollment in the available advanced programs.
- Modify the existing industrial arts program to include student activities that will prepare them to meet the prerequisites needed for enrollment in a selected advanced program.
- Arrange for representatives of advanced programs to visit the industrial arts program for the purpose of appraising the prerequisite training being offered.

STATE GUIDELINE NUMBER 1

PROGRAMS AND/OR SERVICES MUST MEET THE ADMINISTRATIVE PROVISIONS IN PART I OF THE CALIFORNIA STATE PLAN FOR VOCATIONAL EDUCATION

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
1.3 Form an advisory committee to assist in the planning and evaluation of industrial arts programs involving students, parents, administrators, and representatives of community groups and agencies.	• Utilize a district-wide advisory committee for industrial education to review program planning and evaluation. • Conduct a periodic survey of employers in the area to determine whether there is consistent agreement with program planning and to provide information concerning evaluation.

PROGRAM OBJECTIVES	METHODS FOR IMPLEMENTING THE OBJECTIVES:
• Research, review, evaluate and select instructional materials (books, references, instruction sheets, visual aids) needed to implement the revised or added program objectives.	• Make an analysis of all materials needed to offer an instructional program designed to meet the conditions stated in the federal regulations. • Make an analysis of the usefulness and appropriateness of the existing instructional materials. • Show which modifications of instruction are needed to meet the federal regulations and the use of existing instructional materials to implement the program. • Identify areas in which additional instructional materials are needed, review available materials, prepare requisitions for needed and available supplemental materials. • Identify and prepare specifications for additional instructional materials needed but not available and produce the needed materials.
• Develop an effective working relationship between the local industrial community and a specific industrial arts program.	• Identify key people in the industrial community who can contribute information and assistance to a specific industrial arts program. • Acquaint the key people with the program and involve them in appropriate activities. • Establish an advisory committee for the specific industrial arts program made up of representatives of local industries plus representatives of other appropriate community agencies. • Develop a program that allows students to observe or consult with community representatives as a source of supplemental information related to their technical assignments or to their need for occupational information.

STATE GUIDELINE NUMBER 1

PROGRAMS AND/OR SERVICES MUST MEET THE ADMINISTRATIVE PROVISIONS IN PART I OF THE CALIFORNIA STATE PLAN FOR VOCATIONAL EDUCATION

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
1.4 Provide occupational information and exploratory experiences that will prepare students for enrollment in advanced vocational and technical education programs.	• Provide career information to students concerned with programs in advanced instructional areas. • Take students on tours of advanced programs. • Have advanced industrial education students and teachers come to the class to provide orientation. • Emphasize the skills needed by trade and industry which are part of the course content.

PROGRAM OBJECTIVES	METHODS FOR IMPLEMENTING THE OBJECTIVES:
• Provide selected resource personnel to present information on specific jobs and occupations.	• Organize and conduct field trips to applicable businesses and industries and develop a file of related materials for student use. • Provide selected speakers from industry, the business community and local colleges as part of the instructional program. • Provide a resource list from which students can contact employers in their field of interest to become acquainted with a variety of jobs. • Assign students to visit the career guidance center on a regular basis for orientation to materials available to help them make occupational choices. • Develop a file of occupations found in the local business community to be used by students. • Provide students with a list of advanced programs related to occupational areas. • Develop an industry resource committee composed of persons who will meet with students to provide occupational information. The committee should meet on a regular basis and can include former students from the community college and from business and industry.
• Provide opportunities for students to enter competitive events.	• Involve students in VICA club activities and provide opportunities for students to enter competitive contests such as the VICA olympics. • Provide students with project standards to qualify their work for competition. • Develop a program to use competitive activities in the shop or laboratory as a means of providing incentives for the development of technical skills.

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PROGRAM OBJECTIVES

- Develop a work experience program to provide students with exploratory information and experiences based on current work experience practices and procedures.

- Provide students with realistic exploratory experiences for specific jobs and job clusters appropriate to the ability, experience, and achievement of the students.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Identify community industries which will provide work experience assignments related to the instructional program.

- Provide an opportunity through work experience assignments for students to explore occupations as a supplement to the industrial arts program.

- Develop self-instruction units to permit students with special interests and ability to work on an independent basis and minimize the wait for teacher assistance.

- Organize the instructional program on a job-cluster concept that clearly identifies the various kinds of jobs involved in the activities of a specific industrial arts program.

- Provide students with information on job descriptions and job titles that illustrate the variety of jobs in a given industry.

STATE GUIDELINE NUMBER 2

THE PROFESSIONAL STAFF RESPONSIBLE FOR PROVIDING PROGRAMS AND/OR SERVICES MUST MEET THE MINIMUM QUALIFICATIONS AS SET FORTH IN THE CALIFORNIA STATE PLAN FOR VOCATIONAL EDUCATION

PROFESSIONAL STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
2.1 Possession of a valid credential authorizing the teaching of industrial arts education.	• The credential will be registered with the district and county in which the instructor teaches.

STATE GUIDELINE NUMBER 3

IN ADDITION TO THE CALIFORNIA STATE PLAN STANDARDS, PROFESSIONAL STAFF MUST BE QUALIFIED BY PROFESSIONAL TRAINING, INSERVICE, AND WORK EXPERIENCE RELATED TO THE SUBJECT MATTER AREAS TO BE TAUGHT AS DETERMINED BY THE LOCAL EDUCATION AGENCY.

PROFESSIONAL STANDARDS

3.1 Demonstrate knowledge of the goals and objectives of industrial arts education as defined in the California State Plan for Vocational Education.

3.2 Possess the skills and knowledge necessary to assist students in making career choices in one or more career clusters relating to industrial occupations.

3.3 Demonstrate knowledge about advanced training programs in occupations relating to his/her industrial arts class.

3.4 Complete successful work experience in an occupation related to the instructional area.

METHODS OF IMPLEMENTING, MEASURING AND/OR VERIFYING THE STANDARDS:

- The curriculum guide for the instructional program will contain goals and objectives designed to meet the requirements outlined in the California State Plan for Vocational Education and in the interim policies and guidelines which are related to industrial arts program.
- The instructor will be able to furnish proof of successful work experience in an occupational field related to the instructional plan.
- The instructor will provide time during the instructional program for individual counseling with each student concerning career choice.
- The instructor will participate in local professional organizations and technical groups that offer job training for graduates in occupations related to the course of instruction.
- The instructor will maintain an active involvement with industry in order to obtain the most current information about industrial occupations.
- Conduct curriculum meetings with junior high, senior high, and post secondary staff.
- Develop an articulation model with all the educational agencies which offer industrial training programs in the surrounding area.
- The instructor will be able to furnish a statement from his/her former employer verifying successful work experience related to the course of instruction.
- A special summer program of paid work experience can be made available for industrial arts teachers who lack experience in an occupation related to their course of instruction.

STATE GUIDELINE NUMBER 3

IN ADDITION TO THE CALIFORNIA STATE PLAN STANDARDS, PROFESSIONAL STAFF MUST BE QUALIFIED BY PROFESSIONAL TRAINING, INSERVICE, AND WORK EXPERIENCE RELATED TO THE SUBJECT MATTER AREAS TO BE TAUGHT AS DETERMINED BY THE LOCAL EDUCATION AGENCY.

PROFESSIONAL STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS
3.5 Possess an understanding of the American system of industry and free enterprise.	• The instructor will utilize every opportunity offered in the instructional program to help students understand the American system of free enterprise, how it works, and how they can be part of it.
3.6 Maintain and update practical experience in the appropriate subject matter area.	• Work through the advisory committee to provide opportunities for teachers to update their skills with on-the-job experience. • The district can provide salary increments for teachers who update their experience through work. • Create a local plan which provides for the rotation of instructors so that all may periodically obtain fresh work experience.
3.7 Participate in inservice activities on a regular basis.	• The district can encourage attendance at inservice meetings by providing released time for instructors to attend. • An instructor can attend those inservice meetings offered by professional organizations and public agencies on his/her own time. • A teacher who attends an inservice meeting can assume the responsibility for reporting on the meeting to other industrial arts teachers at the school site. • The district can provide salary increments for inservice training and/or recent work experience.
3.8 Possess the skills and knowledge necessary for effective occupational guidance.	• Attend inservice meetings which emphasize techniques and methods for effective vocational guidance. • Work closely with career resource center personnel. • Have personal knowledge of local resources in occupational guidance.

STATE GUIDELINE NUMBER 4

THE PROGRAM, WITH WRITTEN COURSE OBJECTIVES, AND/OR SERVICES MUST PROVIDE FOR BOTH THE DISSEMINATION OF INFORMATION AND EXPLORATION OF CAREERS RELATIVE TO PROVIDING OPPORTUNITIES WITHIN BROAD CLUSTERS OF INDUSTRIAL OCCUPATIONS

PROFESSIONAL STANDARDS	METHODS OF IMPLEMENTING, MEASURING AND/OR VERIFYING THE STANDARDS:

4.1 Possess recent knowledge of vocational guidance and career counseling information and techniques.	• Incorporate into the instructional program student and teacher activities which will give students needed background information on possible career choices, such as:
	  ◦ guest speakers on various careers;
	  ◦ individual and group visits to observe people at work in various industrial and technical jobs;
	  ◦ give students assignments to complete which require their utilization of the career information center;
	  ◦ have students interview someone who is working in the field in which they have expressed an interest.
	• The instructor will show a continued interest in maintaining his skills in career guidance by attending inservice training programs about career information and guidance techniques and by involving himself in the changing world of work.

STATE GUIDELINE NUMBER 4

THE PROGRAM, WITH WRITTEN COURSE OBJECTIVES, AND/OR SERVICES MUST PROVIDE FOR BOTH THE DISSEMINATION OF INFORMATION AND EXPLORATION OF CAREERS RELATIVE TO PROVIDING OPPORTUNITIES WITHIN BROAD CLUSTERS OF INDUSTRIAL OCCUPATIONS

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
4.2 Provide students with exploratory experiences in shops and laboratories and observations in business or industry in order to acquaint them with jobs in appropriate occupations.	• In grade levels 7, 8, and 9, field trips would be appropriate. In grade levels 10, 11, and 12, exploratory work experience programs could be developed in cooperation with the local work experience coordinator. • Rotate small groups of students through different work stations or activities under the direction of an advanced student or teacher-coordinator. • Use programmed instruction materials which contain a variety of audio-visual presentations on various careers.

PROGRAM OBJECTIVES

- Provide opportunities for students to go on field trips that relate to their specific interests.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Identify appropriate sites with assistance from advisory committees, trade associations, and other groups.
- Assign students to select an occupation of interest, visit the appropriate industry, and verify the visit by completing an occupational survey sheet.
- Develop assignments that require students, upon the completion of a field trip, to report on the conditions found or observed such as: job requirements, duties, salary, and criteria for selecting that particular field of interest.

STATE GUIDELINE NUMBER 4

THE PROGRAM, WITH WRITTEN COURSE OBJECTIVES, AND/OR SERVICES MUST PROVIDE FOR BOTH THE DISSEMINATION OF INFORMATION AND EXPLORATION OF CAREERS RELATIVE TO PROVIDING OPPORTUNITIES WITHIN BROAD CLUSTERS OF INDUSTRIAL OCCUPATIONS

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
4.3 Provide occupational information and instruction pertaining to a broad range of occupations, including training requisites, working conditions, remuneration, and other relevant information.	• Develop and implement a Career Information Center at each school. • Organize and sponsor a career fair. Require students to select three possible occupations and show the training requirements for each. • Provide a continuing program of speakers from various occupations. Select a representative variety of occupations. • Students can survey potential careers through field trips and make required reports to fellow students on working conditions, salary range, training requirements, etc. • Establish a review committee to insure that career information materials provided for students are current and relevant.

PROGRAM OBJECTIVES

- Develop occupational information to be used in a specific industrial arts program for an appropriate industrial community.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Develop a comprehensive file of specific occupational information for community industries that covers occupations related to a specific industrial arts program and includes:
    - training requisites, working conditions, salaries or wages, and other relevant information;
    - collections of reference materials available from the industries such as brochures, product or services information;
    - information on employee and employer associations.
- Develop student activities that will result in students using the comprehensive file.
- Develop and implement a regular procedure by which a committee of industrial representatives evaluates and updates the comprehensive file.
- Develop display materials, such as bulletin board displays for the shop or laboratory, that will provide information about the occupations and jobs available to students in a specific industrial arts program.

STATE GUIDELINE NUMBER 5

EQUIPMENT, FACILITIES, MATERIALS, AND SERVICES SHOULD BE RELEVANT TO CURRENT INDUSTRY PRACTICES AND CONTRIBUTE TO DEVELOPING CONCEPTS, EXPERIENCE, AND SKILLS RELATED TO INDUSTRIAL OCCUPATIONS

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
5.1 Utilize the most recent, accepted industrial processes, equipment, facilities, and techniques.	• With the help of the district advisory committee, design a check list that includes acceptable industrial processes, equipment, facilities and techniques. • Utilize the advisory committee and check list to evaluate the program each year.

PROGRAM OBJECTIVES

- Create an industrial environment in the industrial arts shop or laboratory.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Arrange the equipment in a way that represents the specific type of industry being simulated.
- Develop and implement a student personnel system that includes job descriptions, duties, and responsibilities similar to the industry represented.
- Develop student activites, including jobs, projects, and other assignments such as research, that represent tasks performed in typical job classifications and include industrial procedures and standards.
- Show that the program includes group processes such as mass production and production-line processes.
- Include, when appropriate, all aspects of industrial production such as planning and quality control rather than a total emphasis on manufacturing or service operations.

PROGRAM OBJECTIVES	METHODS OF IMPLEMENTING THE OBJECTIVES:
• Provide demonstrations of occupational skills, industrial processes, and the use of materials in a way that will reflect practices in industry.	• Verify and supplement the competencies of the teacher through activities such as summer employment, observations in industry, the study of reference materials that describe industrial practices, and supplemental instruction in existing vocational programs and service schools. • Use craftsmen from industry to demonstrate industrial practices related to this objective. • Review and evaluate the instructional program with respect to this objective with the assistance of industrial representatives.
• Develop student activities (assignments, projects, jobs, exercises) that reflect and emphasize industrial operations and standards.	• Prepare an analysis of the student assignment used to meet the above conditions showing the extent to which it emphasizes industrial operations and standards. • Identify and develop additional student activities needed to supplement the instructional program in order to meet the above program objective. • Develop a program to involve representatives of industry and local advanced training programs to evaluate the appropriateness of student activities assigned to meet this program objective.
• Acquaint students with appropriate industrial standards, licensing requirements, codes, safety and other regulations.	• Make an analysis of the industries and jobs that relate to a specific industrial arts program and develop a list of required standards, licenses, codes, and regulations involved, including the agencies that regulate or enforce the standards. • Gather suitable reference materials and gather or develop materials for instruction in the above program objective. • Develop lessons, including student assignments, that will acquaint students with the identified standards and regulations. • Make an index of resource persons from industry and governmental agencies that can be used to supplement the instructional program related to this program objective.

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PROGRAM OBJECTIVES

- Develop a safety education program based on industrial standards.

METHODS OF IMPLEMENTING THE OBJECTIVES:

- Develop a safety education program to include safety tests for all students enrolled in class.
- Develop and acquaint students with safety standards which comply with practices found in industry.
- Require all students to demonstrate their knowledge of safe practices while in the shop.
- Provide a relationship between the safety requirements used in the shop or laboratory and those used in industry.
- Utilize a safety committee composed of industrial representatives to develop safety standards representing industry.

STATE GUIDELINE NUMBER 5

EQUIPMENT, FACILITIES, MATERIALS, AND SERVICES SHOULD BE RELEVANT TO CURRENT INDUSTRY PRACTICES AND CONTRIBUTE TO DEVLEOPING CONCEPTS, EXPERIENCES, AND SKILLS RELATED TO INDUSTRIAL OCCUPATIONS

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
5.2 Provide instructional and exploratory activities based on current industrial practices.	• Require teachers to attend inservice education programs regularly in order to update knowledge and skill. • Require periodic evaluation of the program by the advisory committee to assess use of current industrial practices. • Exploratory sites should be chosen for the quality of experience they offer to the student. • Utilize services, resources, and support of local industry-education councils when available. • The classroom should be organized to function as much like an actual shop as possible.

PROGRAM OBJECTIVES

- Provide students and counselors with current guidance materials designed to assist students in making informed choices in specific jobs.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- As part of the instructional program, assign students to the task of viewing current multi-media materials appropriate to job market requirements.
- Provide students with resource materials from trade unions, apprenticeship programs, the Employment Development Department, and other sources that relate to working conditions, salaries, etc. Arrange for speakers to be used to describe the area of trade or employment.
- Assign students to develop a list of different job requirements in their area of interest utilizing career resource centers.
- Develop and present to the counseling staff a presentation on the careers relating to a specific instructional area.
- Plan and arrange conferences in which counselors/teachers will discuss with students strategies in selecting a career. Provide assistance from school counselors, district work experience supervisors, manpower counselors, community college counselors and career counselors.
- Require students to develop a list of needed qualifications for a chosen career, listing institutions which can assist in meeting qualification requirements.
- Develop a list of guest speakers for counselors to use in coordinating career information relating to various occupations.

STATE GUIDELINE NUMBER 6

PROGRAMS, WITH WRITTEN COURSE OBJECTIVES, AND/OR SERVICES THAT ARE PROVIDED FOR THE STUDENTS, MUST RESULT IN AN OPPORTUNITY FOR THE STUDENT TO MAKE A MORE INFORMED AND MEANINGFUL OCCUPATIONAL AND/OR EDUCATIONAL SELECTION

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
6.1 Provide assistance to students in making informed and meaningful occupational choices.	• Provide occupational information concerned with industrial and technical careers within the classroom. • Assist the students through interest surveys and aptitude tests and correlate the two. • Expose students to a wide variety of industrial fields through the use of field trips, reports, visitations, films, etc. • The student should be able to name several chores he can actually perform. Each student should know his/her opportunities and limitations. • Have former students return and report on their successes to the class.
6.2 Provide guidance and counseling for students enrolled in the industrial arts program to assist them in making informed and meaningful choices in selected occupational fields.	• Provide occupational information concerned with various careers utilizing classroom information centers and/or school career information centers. • Each students, as a part of his/her industrial arts class work, could consult the occupational outlook handbook regarding an appropriate occupation. • Each student should explore work sites in the community. • Provide inservice programs involving counselors and industrial arts teachers to coordinate guidance and provide counseling to serve all students.

PROGRAM OBJECTIVES	METHODS FOR IMPLEMENTING THE OBJECTIVES:
• Establish a procedure for providing counseling and guidance by the teacher and other specialized counseling personnel.	• Develop a program and schedule that will provide each student with time, on a regular basis, for occupational counseling. • Establish and implement a procedure by which each student will develop a file of personalized occupational information including information on his/her interests, aptitudes, and achievements. • Develop a specific program designed to acquaint school counseling personnel with the nature of occupations and future training and employment opportunities that are available to students who complete a specific industrial arts program. Include information on the kinds of occupational information and reference materials that should be available to students using the counseling services. • Assign students to activities that will acquaint them with the school and community occupational counseling and guidance services. • Develop a reference file of the specific industrial arts program and make the file available to students in the shop or laboratory.
• Provide information and opportunities for students to become aware of and evaluate their potential for success in a selected job or occupation.	• Recommend the establishment of an occupational testing program that will provide students with personal information related to occupational choices. • Assign students to take the tests related to their occupational interests. • Develop course assignments in the exploratory "hands on" program that will provide the teacher and student with evidence to evaluate occupational choices.

Continued on page 40

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Assign students to perform realistic industrial tasks as a part of the exploratory program.
- Provide alternative assignments to give selected students opportunities for further exploration or preparation in an area of identified interest.
- Develop a procedure for and assign students to make a self-analysis of their occupational interests or choices in terms of their occupational activities.
- Make available to students information that will relate their exploratory experience to available jobs.

STATE GUIDELINE NUMBER 6

PROGRAMS, WITH WRITTEN COURSE OBJECTIVES, AND/OR SERVICES THAT ARE PROVIDED FOR THE STUDENTS, MUST RESULT IN AN OPPORTUNITY FOR THE STUDENT TO MAKE A MORE INFORMED AND MEANINGFUL OCCUPATIONAL AND/OR EDUCATIONAL SELECTION

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
6.3 Provide students with the opportunity to internalize the concept that work has dignity and to develop an appreciation for good workmanship.	• Help students take pride in their work by rewarding them for work well done. • Provide students with opportunities for self-evaluation. • Use time cards and a voucher payment system for work performed within the classroom.

PROGRAM OBJECTIVES

- Provide students with learning experiences which would encourage them to appreciate the importance of each occupation in meeting the needs of the community.
- Provide students with opportunities to compare products with good workmanship with those of poor workmanship.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Design a learning experience for small groups of students to work cooperatively on the accomplishment of a task.
- Provide examples of products with good workmanship and poor workmanship.
- Design a self-assessment strategy for students to evaluate the workmanship of products they make.

STATE GUIDELINE NUMBER 7

PROGRAMS, WITH WRITTEN COURSE OBJECTIVES, MUST SHOW EVIDENCE OF ARTICULATION AND COORDINATION ON AN INTRA- AND INTER-CURRICULAR BASIS, GRADE LEVELS 7 THROUGH 12

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
7.1 Design and operate programs as an adjunct or introduction to a related vocational education training program.	• The pre-vocational industrial arts class should be articulated with a vocational class with cooperation from both teachers. • Programs located within a community college attendance area will develop and use a common, standardized set of course names, numbers, and descriptions. • Provide inservice training for teachers on ways, means, and benefits of articulating programs. • Identify the sequence of skills appropriate to each level of instruction to reduce duplication.

PROGRAM OBJECTIVES

- Develop articulation and coordination between industrial arts education programs and related vocational industrial education programs.

METHODS FOR IMPLEMENTING THE OBJECTIVES:

- Design industrial arts education programs so that they relate sequentially to related vocational education training programs.
- Conduct a yearly review of industrial arts education and vocational education programs to insure that the sequence of skills taught in each course is appropriate for that level.

STATE GUIDELINE NUMBER 7

PROGRAMS, WITH WRITTEN COURSE OBJECTIVES, MUST SHOW EVIDENCE OF ARTICULATION AND COORDINATION ON AN INTRA- AND INTER-CURRICULAR BASIS, GRADE LEVELS 7 THROUGH 12

PROGRAM STANDARDS	METHODS OF IMPLEMENTING, MEASURING, AND/OR VERIFYING THE STANDARDS:
7.2 Develop an articulated relationship with vocational industrial education programs available in the area.	• Form a community college attendance area industrial education articulation committee to develop a program articulation model into which all appropriate industrial arts programs can fit. • Form a committee to establish coordination in developing and sharing course content and course outline materials. The committee could include personnel from industrial arts programs in junior high, senior high, community college, and adult education levels. • Program development should show evidence of continuity of each level by a student progress chart considering growth in predetermined phases and reporting student test results at different levels.

PROGRAM OBJECTIVES	METHODS FOR IMPLEMENTING THE OBJECTIVES:
• Develop articulation agreements between a specific industrial arts program and institutions offering advanced or highly skilled training.	• Become acquainted with all of the advanced programs available to students enrolled in a specific industrial arts program. • Gather comprehensive information on the advanced programs and make this information available to interested students. • Invite teachers from the advanced programs to serve as guest speakers to explain the advanced programs. • Develop, in cooperation with the advanced programs, a procedure by which qualified students can receive advanced standing in the advanced programs for work completed in the appropriate industrial arts class. • Develop a system of student achievement and performance records, covering work in the industrial arts program, that can be made available to the advanced institution for the purpose of placing the industrial arts student at the appropriate level in the advanced program.
• Provide opportunities for students to visit appropriate institutions and programs offering advanced training opportunities which relate to a specified industrial arts program.	• Make the necessary arrangements and provide students with the information needed to visit appropriate advanced programs. • Develop an assignment covering student activities during observations of advanced programs. • Assign students to re-evaluate their choice of advanced training in terms of the observations made and the information gathered during visits to advanced training programs.

REVIEWING THE INDUSTRIAL ARTS EDUCATION PROGRAM

When an industrial arts education program is part of the local district plan for vocational education, it should be reviewed regularly in terms of the twelve functions of vocational education. The district person responsible for vocational education is also responsible for data related to these functions. For purpose of evaluation, these functions are grouped into five categories.

I NEEDS AND OPPORTUNITIES INFORMATION

A. POPULATION NEEDS: Providing current and usable information on the district's populations seeking or needing vocational education.

B. JOB MARKET: Providing current and usable information that identifies and projects job market opportunities and needs in the labor market served by the district.

C. JOB PERFORMANCE REQUIREMENTS: Specifying and updating, as a basis for instruction, the performance requirements (skills and knowledge) of each occupation included in the industrial arts education offerings.

II PLANNING

A. PROGRAM PLANNING: Designing long- and short-term planning to provide industrial arts education offerings meeting the needs of the district's population and the labor market the district serves.

B. VOCATIONAL EDUCATION PROMOTION: Informing (1) the public and its decision-making representatives of the strengths and merits of industrial arts education, and (2) target populations of industrial arts education opportunities and advantages.

C. STUDENT RECRUITMENT: Identifying and enrolling in industrial arts education those students and potential students who can profit from such instruciton.

D. CURRICULUM RESOURCES AND ANCILLARY SERVICES: Providing resources and services necessary to maintain, expand, and improve appropriate industrial arts education offerings and to develop new offerings as needs emerge. (Note: These include teachers and staff, inservice education, facilities, equipment, and instructional materials).

III STUDENT SERVICES

A. GUIDANCE AND COUNSELING: Assisting individuals to make meaningful and informed occupational and program choices from the options available and suitable to them.

B. PLACEMENT: Assisting district students desiring employment to become employed in situations which fit their needs and the needs of employers.

IV INSTRUCTION

A. VOCATIONAL INSTRUCTION: Providing industrial arts education offerings which meet the needs of the district's population and the labor market.

V EDUCATIONAL ACCOUNTABILITY

A. PROGRAM REVIEW: Examining current and proposed industrial arts education offerings in relation to the program of industrial education.

B. EVALUATION: Providing ongoing and periodic assessment of how well the district is performing its industrial arts education functions as a basis for program improvement and management decisions, both locally and at state and national levels.

Appendix D provides a needs assessment instrument which may be used by a district to review industrial arts education programs to detemine how well they fulfill the requirements as stated in the twelve functions of vocational education. These needs assessments could be shared with the district advisory committee in order to obtain their advice and support.

APPENDIX A

INDUSTRIAL ARTS EDUCATION AND THE CALIFORNIA STATE PLAN FOR VOCATIONAL EDUCATION

The California State Plan for Vocational Education states specifically what the objectives should be of those industrial arts education programs which are part of vocational education.

12.0 INDUSTRIAL ARTS

12.1 DEFINITION

Industrial arts education programs are those educational programs which pertain to the body of related subject matter, or related courses, organized for the development of understanding about the technical, consumer, occupational, recreational, organizational, managerial, social, historical, and cultural aspects of industry and technology including learning experiences involving activities such as experimenting, designing, constructing, evaluating, and processes which provide opportunities for creativity and problem solving and assisting individuals in the making of informed and meaningful occupational choices.

12.1.1 OBJECTIVES OF INSTRUCTION. THE OBJECTIVES OF INDUSTRIAL ARTS EDUCATION WHICH ARE A PART OF VOCATIONAL EDUCATION ARE DESIGNED TO:

(a) Assist individuals in the making of informed and meaningful occupational choices. In order to accomplish or facilitate this purpose, such programs shall:

(1) provide occupational information and instruction pertaining to a broad range of occupations, including training requisites, working conditions, salaries or wages, and other relevant information;

(2) provide exploratory experiences in shops, laboratories, and observations in business or industry to acquaint students with jobs in the occupations included in this purpose;

(3) provide guidance and counseling for students enrolled in the industrial arts program to assist them in making informed and meaningful choices in selected occupational fields; and/or

(b) Prepare individuals for enrollment in advanced vocational and technical education programs. In order to accomplish or facilitate this purpose, such programs shall:

(1) provide individuals with occupational information and exploratory experience for enrollment in such programs;

(2) provide occupational information and exploratory experience directly related to current practices in industry.

12.1.2 OCCUPATIONS TO BE SERVED. INDUSTRIAL ARTS EDUCATION PROGRAMS FOCUS ON A BROAD SPECTRUM OF OCCUPATIONS AND CLUSTERS OF OCCUPATIONS RELATED TO INDUSTRY WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE CAREER FIELDS SUCH AS TRANSPORTATION, MANUFACTURING, CONSTRUCTION, COMMUNICATIONS, AND THOSE PROGRAM AREAS NORMALLY ASSOCIATED WITH INDUSTRIAL EDUCATION.

APPENDIX B
DEFINITIONS

Industrial Education

Industrial Education is a generic term which applies to all levels of education and training that relate directly to industrial occupations. Industrial education includes the major subject matter fields of industrial arts, trade and industry, technical, and health careers and services.

Industrial Arts Education (USOE Code 10.00)

Industrial arts education programs are those educational programs which pertain to the body of related subject matter, or related courses, organized for the development of understanding about the technical, consumer, occupational, recreational, organizational, managerial, social, historical, and cultural aspects of industry and technology including learning experiences involving activities such as experimenting, designing, constructing, evaluating, and processes which provide opportunities for creativity and problem solving and assisting individuals in the making of informed and meaningful occupational choices.

Trade and Industrial Education (USOE Code 17.00)

Trade and industrial education programs are organized to develop basic manipulative skills, safety practices, judgment, technical knowledge and related occupational information for the purpose of fitting persons for initial employment in industrial occupations, supplementing on-the-job training of apprentices, or the upgrading and pretraining of workers currently employed in industry.

Technical Education (USOE Code 16.00)

Technical education programs are devoted to the instruction and training for occupations above the craftsperson or trade levels but not generally professional in nature. The programs normally require less than a baccalaureate degree and qualify persons for employment in paraprofessional positions and as technicians, engineering aides, and production specialists.

Students with Special Needs

Individuals with "special needs" may be defined as "those persons who are or have been adversely affected by physical, academic, socio-economic or other factors and conditions who require special supportive, educational, medical or guidance assistance and services in order to benefit from an industrial arts education program."

APPENDIX C

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APPENDIX D
INDUSTRIAL ARTS EDUCATION
PROGRAM NEEDS ASSESSMENT

1.0 Population Needs Analysis

1.1 Indicate anticipated number of students to be served

1.1.1 Junior High School _____

1.1.2 Senior High School _____

1.1.3 Other _____

1.1.4 Students with special needs (specify) _____

_____

1.1.5 Has a student interest survey been conducted? _____

2.0 Job Market Analysis

2.1 Name potential employer and/or community individuals who have indicated there is a need for this program

1. _____

2. _____

2.2 Other statistical evidence of a job market

3.0 Job Performance Requirements

3.1 Specify job titles for which the course will provide occupational information

1. _____ 4. _____

2. _____ 5. _____

3. _____ 6. _____

4.0 Curriculum Resources/Ancillary Services

4.1 Teaching credential required

4.2 Statement of expenditures

5.0 Program Planning

5.1 Is there an existing course with a similar title and/or curriculum offered in the

same school _____

any other school in district _____

5.2 Estimated course length in hours _____

5.3 Course prerequisites, if any: _____

_____

6.0 Program Review

6.1 State the monitoring activities to ensure the course will proceed toward the stated objectives

7.0 Program Promotion

7.1 Explain promotional activities for the program

7.2 Attach a course description

8.0 Student Recruitment

8.1 List grade levels to be served _____

9.0 Guidance and Counseling

9.1 Special abilities required of students, if any:

_____

9.2 How will these be determined? _____

_____

10.0 Program Instruction

10.1 Describe the work students are expected to perform and the conditions under which the work will be performed:

_____

_____

11.0 Placement

11.1 List advanced programs in which students will be able to enroll as a result of their training in this program

_____

_____

12.0 Evaluation

12.1 How will program effectiveness be measured? _____

_____

_____

APPENDIX E
STRATEGY FOR LEARNING ABOUT JOBS RELATED TO INDUSTRIAL ARTS EDUCATION

There are many occupations which require the skills and knowledge students are learning in their industrial arts courses. This strategy should assist them in relating their industrial arts instructional programs to occupations requiring skills they are learning.

Objectives

Identify three jobs which require skills or knowledge you are learning in your industrial arts class.

• • • • • • • • • • • • • • • • • •

Course Title _____

Skills or knowledge you are learning in this class.

_____

_____

_____

_____

List three jobs which require the above skills or knowledge. After each job identify which skills or knowledge relate to that particular job.

Job Title	Skill or Knowledge
_____	_____
_____	_____
_____	_____

From the want ad section of the newspaper clip out help-wanted advertisement for the three jobs you identified above.

How many help-wanted ads were there for each of the three jobs?

_____

_____

_____

How did this compare to the number of help-wanted ads for other kinds of jobs?

_____

What does this tell you about your chances of getting such a job?

_____

Go to the library and look up information about the projected need for workers in each of these three jobs.

Referring back to the list of skills or knowledge you are learning in this class, list the things you enjoy doing most.

_____

_____

Identify the things you feel you do best from the list.

_____

_____

Identify courses or training you can take in future years in your school or community which would continue to develop these skills or knowledges so that you could get one of the jobs you cut out of the classified ad section of the newspaper.

Course or Training Program **Location**

_____

_____

_____

Teaching Resources:

Encyclopedia of Careers, Volumes I & II, Thiemann, Norm (editor) Garden City, New York; Doubleday.

Handbook of Job Facts, Chicago: Science Research Associates.

United States Department of Labor, **Dictionary of Occupational Titles,** Washington, D.C.; U.S. Government Printing Office.

APPENDIX F

CALIFORNIA STATE DEPARTMENT OF EDUCATION
BUREAU OF INDUSTRIAL EDUCATION

PROCEDURES FOR REQUESTING THE INCLUSION OF INDUSTRIAL ARTS EDUCATION PROGRAMS IN DISTRICT PLANS FOR VOCATIONAL EDUCATION

Instructions:

If a local educational agency wants to include certain industrial arts education programs as amendments to their 1974-75 Plan or as part of their 1975-76 Plan, then all of the following information must be provided.

Part I - CURRENT INDUSTRIAL ARTS EDUCATION PROGRAM DESCRIPTIONS, GRADES 7-12 (Districts are only required to submit Part I data one time)

1. Submit a description of each industrial arts education course offered.

2. Submit a listing of industrial arts education teachers and their class teaching schedule.(Excerpts from a class schedule are acceptable.)

3. Describe other supportive services that are provided explicitly for industrial arts education students; i.e., guidance, counseling, student organizations, field trips, etc.

4. Describe professional development activities that are provided by the district for industrial arts education teachers; i.e., inservice education, field trips, special classes, etc.

5. Describe how the program and/or services have been articulated and coordinated on an intra- and inter-curricular basis.

Part II - COMPLETION OF FORM VE-30 (FORMERLY TABLE "A")

List only those industrial arts education programs that fully meet both the California State Plan for Vocational Education (As Amended) and the attached policies and procedures. A separate VE-30 is required for submitting the 1975-76 Plan.

Codes for Reporting Industrial Arts Education Programs

Utilize the following codes: (Code 12.000 listing in form VE-30 for Industrial Arts Education is **incorrect.**)

10.01	- Construction	10.13	- Manufacturing
10.02	- Industrial Crafts	10.14	- Metals
10.03	- Drafting	10.15	- Plastics
10.04	- Electricity-Electronics	10.16	- Automotive Mechanics
10.06	- General Industrial Arts	10.1603	- Power Mechanics
10.07	- Graphic Arts	10.19	- Woods
10.0702	- Photography	10.99	- Other, Industrial Arts

PART IV - PROCEDURAL STEPS

1. All amendments and plans must be developed in cooperation with the district person responsible for vocational education.

2. All amendments and plans must have the approval of the districtwide committee for vocational education and the superintendent.

3. The original plus three copies of Parts I, II, and III, must be submitted to the Regional Coordinator for Vocational Education in your service area for recommendations and processing.

4. No programs and/or services should be implemented prior to receiving approval from the State Department of Education.

5. Assistance is available by contacting the Regional Supervisor in Industrial Education serving your area.

Coastal	Central	Southern
4075 State Bldg. 1111 Jackson St. Oakland, CA 94607 Phone: (415) 464-0393	1919 21st St. Sacramento, CA. 95814 Phone: (916) 445-9570	601 W. Fifth St. Suite 1000 One Bunker Hill Bldg. Los Angeles, CA 90017 Phone: (213) 620-3424

PART III

PROPOSED INDUSTRIAL ARTS PROGRAM

1. School _____

2. Program Code _____

   Program Title _____

   Grade Level _____

3. Course outline with performance objectives:

   A. Existing course outline _____
   B. Student performance objectives _____
   C. New activities and/or units of instruction to achieve student performance objectives _____

4. Staff Qualifications:

   A. Name of teacher _____
   B. Credential (be specific) _____
   C. Describe work experience (outside of teaching) related to the subject to be taught and length of each experience.

   _____

   _____

   _____

   _____

5. A. Describe facility and equipment available to achieve student performance objectives.

   _____

   _____

   _____

   B. The following equipment is needed to achieve the student performance objectives which is not available at the present time:

   _____

   _____

C. If new equipment is not available, what are the alternatives for achieving the student performance objectives?

6. Articulation:

Describe how this particular program is articulated with feeder schools and schools offering more advanced instruction.

7. Coordination:

Describe how this particular program is coordinated with other related and appropriate units of instruction provided in industrial education and general education within the school.